



West Bank and Gaza Integrated Solid Waste Management Project – Phase 1 (ISWMP – 1)

Terms of Reference

Consultancy Services for:

Environmental and Social Assessment for the Rehabilitation, Upgrade and Expansion of Zahrat Al-Finjan and Al-Minya Sanitary Landfills

1. Background

The Palestine Liberation Organization for the benefit of the Palestinian Authority delegated the Ministry of Finance (MoF) to allocate fund from the World Bank Group towards implementing the first phase of the West Bank & Gaza Integrated Solid Waste Management Project (ISWMP-1) through the Municipal Development and Lending Fund (MDLF) on behalf of the Ministry of Local Government. The ISWMP is a strategic program aims to improve solid waste management (SWM) practices towards circular economy departing from the linear mode of SW management in line with national strategies and plans. The current first phase of the project, ISWMP-1, will focus on addressing the urgent gaps in infrastructure and equipment by expanding disposal capacity at the two existing official sanitary landfills in the West Bank, i.e Zahrat Al-Finjan and Al-Minya Sanitary landfills located respectively in Northern and Southern West Bank, in addition to the construction and/or rehabilitation of selected SWM transfer stations, among other measures the ISWMP-1 will provide and introduce to lay the foundation for critical policy reforms and institutional capacity building to ensure the sector's long-term operational, financial, and institutional sustainability.

Environmental Impact Assessment (EIA) was prepared for both sites under the former World Bank Operational Policies, and ISWMP-1 interventions require an update to the baseline in accordance with the Environment and Social Standards (ESS), following is a description of the sites subject of this terms of reference:

Zahrat Al-Finjan Sanitary Landfill: located in the governorate of Jenin, (32°22'47.49"N, 35°12'28.19"E), in northern West Bank and was commissioned in 2007 to serve the governorates of Jenin and Tubas. The landfill extended its services to cover the northern and middle West Bank sheds that include the governorates of Jenin, Nablus, Qalqilia, Tulkarem, and Tubas in addition to Ramallah/Al-Bireh Governorate, with the absence of an official disposal site in the middle shed of the West Bank. The site was designed and constructed up to standard, and it included lined cells, leachate collection and evaporation pond, weigh bridge, administrative building, maintenance buildings, and peripheral road. The landfill receives more municipal solid waste (MSW) than its design capacity reaching a total of approximately 6 million tons overall mass with daily input of 1,400. The absence of means to extend the landfill, the filling area grew vertically to reach a height ranging from 30 to 50 meters above surrounding natural ground with side slopes that reached in some parts of the landfill as steep as 32 degrees (1H:1.5V); which can be considered unsafe. The existing landfill mass occupies a footprint of approximately 14.5 ha (145,000 square meters) over five cells with a total capacity of 5.5 million cubic meters. The site has limited room for horizontal expansion with an available plot of land of 2.5 ha (25,000 square meters), however additional land is owned by the JSC located in the vicinity of the landfill but



disconnected from the existing landfill cells. The site has been operated since its opening by the Joint Service Council for Solid Waste Management in Jenin Governorate (JSC-JN). The JSC-JN is also responsible for collection services and transfer of MSW from most parts of Jenin Governorate and other surrounding LGU's to the landfill.

Al-Minya Sanitary Landfill: located in the governorate of Bethlehem, (31°37'2.16"N, 35°13'55.89"E), in southern West Bank and was commissioned in 2011 serving the governorates of Hebron and Bethlehem in addition to parts of east Jerusalem. The site was designed and constructed up-to-standard, and it included lined cells, leachate collection system, weigh bridge, administrative building, maintenance buildings, and peripheral road. The landfill receives, as well, more MSW than its design capacity of 630 tons/day, while it currently receives approximately 1,400 tons/day with total disposed SW amounts to approximately 4.5 million tons since landfill commissioning. The existing landfill mass occupies a footprint of approximately 20.35 ha (203,500 square meters) over 8 cells; 6 of which are closed, and one is currently in preparation, and the 8th cell is reserved for expansion; that is the site has substantial space for expansion under the existing landfill boundary. The site has been operated since its opening by the Joint Service Council for Solid Waste Management in Hebron and Bethlehem Governorates (JSC-H&B). The JSC-H&B is also responsible for collection services (in some areas) and transfer of MSW to the landfill.

Both existing sites suffer from persistent odor with huge leachate quantities beyond lagoons design capacity, which has a negative effect on surrounding communities and on personnel working in both sites, that is leachate management relies on evaporation lagoons. Both sites do not have gas collection and management system. The daily cover varies between both facilities, the younger Al-Minya site use daily cover systematically, while the aging Zahrat Al-Finjan site limited the use of daily cover for economic and void space considerations.

The proposed project involves the rehabilitation and expansion of two existing sanitary landfill facilities: Zahrat Al-Finjan Landfill and Al-Minya Landfill. No other landfill sites are included under these Terms of Reference. Both facilities are currently operational and serve multiple local authorities.

This terms of reference is interdependent with a parallel assignment reserved for conducting detailed design for the rehabilitation, upgrade, and extension of the two-landfill facilities. The outputs this assignment shall therefore be closely aligned with, informed by, and direct the design assignment in terms of environmental and social requirements, without duplications of responsibilities. Both landfills have been subjected to a Environmental and Social Audit (August 2024), which identified a range of environmental, social, health and safety (ESHS) risks, with recommended corrective actions that shall be accommodated in both the design and the ESMPs anticipated under this assignment, all within the umbrella of the program's (ISWMP-1) environmental and social commitment plan (ESCP). The nature and scale of the construction works (under design), and the sensitivity of landfill-related risks (operations), a comprehensive Environmental and Social Impact Assessment (ESIA), supported by a detailed Environmental and Social Management Plan (ESMP), is anticipated under this assignment.



2. Objective of the Assignment

The overall objective of this assignment is to assess the environmental, social, health, and safety impacts, associated with the proposed landfills rehabilitation and expansion works, and to define practical, site-specific measures to avoid, minimize, mitigate, or manage adverse impacts during construction and operation, in line with the Environmental and Social Commitment Plan (ESCP), for the West Bank and Gaza Integrated Solid Waste Management Project- Phase 1. The specific objectives are to:

- 2.1. Prepare an Environmental and Social Impact Assessment (ESIA) including Cumulative Impact Assessment (CIA) for the existing and planned works at Zahrat Al-Finjan and Al-Minya Sanitary Landfills.
- 2.2. Prepare and provide training on Environment and Social Management Plan (ESMP), and Environmental and social Management System (ESMS).

The outputs shall include all associated environmental and social risk management instruments consistent with the ESCP commitments and ensure alignment with applicable national regulations and World Bank Environmental and Social Framework (ESS1 to ESS10). The output shall integrate requirements related to labor management, occupational health and safety, community health and safety, pollution reduction and prevention, waste management, and emergency preparedness in addition to risks and impacts that have been identified in the Environment and Social Audit's recommended corrective actions and the ESCP. The output should support MDLF and the Joint Service Councils (JSCs) responsible for managing the project and operating the landfills (respectively) in fulfilling their institutional, monitoring, reporting, and disclosure obligation as per the ESC.

The ESIA Consultant shall work closely with the Design Consultant responsible for the detailed design of the project to ensure that design elements respond to and are informed by the environmental and social requirements of proposed activities. The ESIA/ESMP and detailed design processes will be carried out in parallel, with continuous coordination among both teams to ensure alignment between impact assessment findings, mitigation measures, and design outcomes.

3. Scope of Service

The Consultant shall review all available project documentation, including the original EIAs and ESIA's conducted for both sites, Environmental and Social Audit and its recommended corrective actions, in addition to the Environmental and Social Commitment Plan (ESCP). This review will also cover existing permits, approvals, operational manuals, publications, and monitoring records. In addition, the Consultant shall examine applicable national legislation as well as relevant international standards and guidelines to ensure comprehensive understanding of the regulatory and operational context. This review accompanied by field investigation shall provide the background to establishing the baseline enabling assess the cumulative impact of past, present, and planned activities in both sites relying on historic data and documents and on data collected directly by the Consultant for present day status. More specifically, the Consultant shall perform the following:



3.1. Review of Legal and Policy Framework

The Consultant shall utilize and build on the review performed under the Environmental and Social Audit in 2024 and identify any changes that took place since then. That includes applicable legal, regulatory, and policy framework governing environmental protection, labor conditions, occupational health and safety, public health, and solid waste management in Palestine, as well as relevant international requirements. The review shall include the following:

- National legal and regulatory framework: applicable Palestinian laws, bylaws, regulations, and permitting requirements related to the environmental protection, solid waste management, hazardous materials, occupational health and safety, labor conditions, public health, traffic safety, and land use. The Consultant shall identify relevant approval and permitting requirements applicable to the rehabilitation and expansion of existing landfill facilities.
- Environmental and Social Commitment Plan (ESCP) for the West Bank and Gaza Integrated Solid Waste Management Project-Phase 1, as the ESIA and ESMP shall be fully consistent with the commitments and institutional responsibilities defined in the ESCP.
- World Bank Environmental and Social Framework (ESF), including all relevant Environmental and Social Standard (ESS1 – ESS10). Particular attention shall be given to standards most relevant to landfill rehabilitation and expansion projects, including ESS1 (Assessment and Management of Environmental and Social Risks and Impacts), ESS2 (Labor and Working Condition), ESS3 (Resource Efficiency and Pollution Prevention and Management), ESS4 (Community Health and Safety), ESS5 (Land Acquisition and Involuntary Resettlement), ESS6 (Biodiversity Conservation and Sustainable Management of Living Natural Resources), ESS8 (Cultural Heritage), and ESS10 (Stakeholder Engagement and Information Disclosure).
- Good International practice guidelines, including internationally recognized guidelines for sanitary landfill design, construction, operation, and closure, occupational health and safety, and community protection. Where gaps exist between national regulations and international good practice, the more stringent requirement shall apply.

3.2. Stakeholder Engagement

The Stakeholder engagement process shall be integrated throughout the ESIA work and be aligned with detailed design work. The Consultant shall utilize and refine the project's stakeholder engagement plan (SEP) and implement it in the early stage of the assignment. The Consultant is expected to engage with the most relevant stakeholders, including vulnerable groups, with closer engagement, for the purposes of the ESIA and collect their input on what they consider are the most important aspects and impacts of the project and how these should be better addressed through the design and implementation of the project. The Consultant is expected to engage stakeholders in the most effective manner in line with the applicable national and international standards e.g.

- (1) Targeted consultations/tailored series of meetings including focus-group discussions and interviews specifically with the surrounding communities and the potentially affected groups such as farmers.



- (2) Wide public consultations with a range of community stakeholders to explore and identify public needs and concerns.

The Consultant shall make available all relevant information to the stakeholders, describing project history and components, scope, and anticipated impacts. The consultation process shall be documented via standard record keeping for each meeting: a formal record should be made including the agenda, signed lists of participants, a summary of the issues discussed, and copies of materials provided to the participants. Furthermore, participants' information shall be aggregated in terms of their organizational affiliation, gender, socio-economic level, where applicable, and their views and concerns shall be documented. The Consultant will be responsible for the translations necessary during the public consultations.

The output from the stakeholder engagement process shall feed into the ESIA scope and workplan, and the process shall be dynamic in nature across the different stages of ESIA preparation and the finalization of the detailed design as shall be detailed in the specific stakeholder engagement plan prepared by the Consultant. The Joint Service Councils (JSCs) supported by the MDLF will facilitate and engage alongside the Consultant in the above meetings. As and if needed, the Consultant in charge of the detailed technical design should accompany the ESIA Consultant in the consultation to ensure that the progress in the design is well explained and that the views of the stakeholders are considered in the revisions of the design.

3.3. Environmental and Social Baseline Data

The Consultant shall utilize and verify existing baseline data available in the Environment and Social Audit Reports and in previous EIA's, that is by using data in existing literature and collecting any missing data directly from the field where necessary. Typically, baseline data include physical, biological, socio-economic and socio-cultural aspects. Characterizing the existing environment and social impacts accounts for existing noise levels, noise generators, data on water, air and soil pollution (direct and indirect) in-situ and surrounding areas, data on ecosystems, flora and fauna, land-use, water use, cultural heritage, surrounding land use, characteristics of the nearest communities, any informal waste related activities household surveys. The following outlines the environmental and social baseline assessment elements that shall be investigated and documented by the Consultant, at a minimum:

A. Environmental Baseline Assessment

The consultant shall prepare the environmental baseline including new field investigations and sampling and laboratory testing as required. Sampling locations, parameters and methodologies shall be justified and consistent with good international practice.

covering at minimum:

- Pollution is associated to hazardous and medical waste intrusion into the landfill.
- Surface water and groundwater conditions
- Leachate generation, pollution, and management
- Air quality and air pollution levels including landfill generated gaseous emissions
- Noise and vibration
- Soil conditions and soil stability conditions



- Environmental health impacts on workers and communities
- Climate related risks relevant to site specific landfill operations.

B. Social and Community Baseline Assessment

- Review demographic and socio-economic conditions of surrounding communities.
- Identify sensitive receptors and vulnerable groups
- Review land use, land ownership and access arrangements
- Assess community health and safety conditions related to landfill operations
- Assess complaints and concerns raised by local communities related to the operation of the waste facilities.
- Assess processes in place for dealing with grievance and for engaging with stakeholders.

C. Occupational Health and Safety Assessment

- Review existing occupational health and safety policies, procedures and arrangements
- Assess workers exposure to physical, chemical and biological hazards and pollution.
- Review accident records and health monitoring practices
- Identify and update gaps in OHS management systems and practices building on the findings of the environmental and social audits performed for both sites.

3.4. Environmental and Social Impact Assessment

Both sites are subject to detailed design accommodating the recommendations of the environmental and social audit , mainly for the (i) rehabilitation of existing sites in terms of closure of finished cells, installation of leachate and gas management systems, and (ii) expansion of existing sites via extending the current footprint with all required engineering works in terms of excavation works, installation lining systems, leachate collection and management systems, with such extension will overlap with current waste mass, and (iii) the operation of the facilities during and post construction works.

The nature of both sites, being historically established as sanitary landfills, necessitates the study of the cumulative impact of the various activities. That is, the cumulative impact assessment shall consider the combined effects of past, existing, and planned activities for both sites within the project's zone of influence. The assessment shall be conducted for the relevant environmental and social standards focus on valued environmental and social components including but not limited to pollution of air quality and odor, water groundwater and surface water resources, and social, biodiversity and natural habitat impacts, traffic and road safety, and community health and wellbeing. historical and cumulative impacts shall be assessed across the construction, operational, closure, and post-closure phases, considering long-term trends in waste generation, population growth, and climate variability. Impacts associated with the construction and operation in both sites shall cover the following:

- (1) Identity environmental and social impacts during rehabilitation, expansion, and operations of both landfills.
- (2) Assess impacts and risk associated with design elements defined under the landfill design & rehabilitation assignment, including liner systems, leachate and gas management, storm water control, internal traffic, and side slopes, odors, vector control, worker safety, and community health and safety at the various stages of sites'



- development. The Consultant shall work closely in this regard with the design Consultant.
- (3) Assess risks associated with construction activities undertaken under live landfill operation conditions, including interactions between waste disposals activities, construction machinery, workers, and incoming waste transport.
 - (4) Identify the geographical zone of influence of the project for the different environmental (e.g. the types of emissions and impact modeling, in line with the World Bank ESF and the international accepted standards, will be used to estimate the magnitude of environmental effects) and social parameters and the specific environmental ecosystems on which the cumulative impact assessment should focus (e.g. assess whether the project and its activities can disrupt/limit future development).

The ESIA report indicative table of contents shall include the following:

3.4.1. Executive Summary

This section will provide a non-technical summary of the project objectives, brief project component descriptions, brief non-technical description of significant findings and recommendations to minimize environmental and social management impacts. The executive summary should be able to read on its own, outlining both the ESIA process and the main conclusions and should be submitted in English and Arabic languages.

3.4.2. Description of the Project and Project Components

Provide a brief overview of the sector and the project background, with illustrative maps at appropriate scales to show sites' components and detailed vicinity area. The project description shall also focus on the activities subject of detailed design and related to the baseline data to present a clear understanding of the nature and scale of each impact assessed.

3.4.3. Environmental and Social Information and Baseline Data

The environmental and social description should be concise and focused on those environmental and social aspects where potential impacts of the project can be expected, utilizing existing baseline data available in the Environment and Social Audit Reports. The Consultant will present environmental and social data on the following items:

- (1) Physical (e.g. geology, topography, climate and meteorology, air quality and emissions, sources of noise, surface and groundwater hydrology, water quality, water extraction and pollution discharges, drainage patterns) and biological environment (e.g. flora, fauna, rare or endangered species). The Consultant should also refer to the geological and topography surveys undertaken as part of the detailed design work.
- (2) Socio-economic and cultural environment (e.g. affected population, demographic characteristics and density, land use, planned development activities, employment, distribution of income, goods, services, recreation, health -general information about the type of health implications typically connected to construction and operation of project, and cultural properties, any informal waste related activities on site or around it).



- (3) Labor Management Procedures of landfills workers (e.g. number of workers, type of workers, working and site conditions, workers' rights, occupational health and safety risks of workers, workers grievance mechanism).

3.4.4. Environmental and Social Impacts

The Consultant shall list and describe all relevant potential environmental and social impacts and their historical and cumulative impacts, to be categorized for each type of activity. The Consultant is expected to investigate and elaborate in detail the potential impacts covering the following at least:

- (1) Underlying geological and hydrogeological conditions at the landfill sites: using existing information, the geology and groundwater conditions should be described for each landfill site that may be affected including the following: stratigraphic, lithologic, and physical characteristics and thickness of each stratum, including the location and depth of each aquifer; the hydrogeologic characteristics of each aquifer, including hydraulic conductivity, groundwater hydraulic gradient and velocity, the geologic structure at the proposed facility and its relation to the regional geological structure, the uses of each aquifer, aquifer characteristics necessary to describe three dimensional groundwater flow underlying the proposed facility, and provide all associated pollution data.
- (2) Environment and biodiversity: landfill construction and operation activities may alter species composition, attract opportunistic species, and pose risks to soil, groundwater, and surface water ecosystems through potential contamination. The Consultant shall assess direct, indirect, and cumulative impacts including increased access and land-use change, which may affect biodiversity and associated ecosystem services. Impacts on different elements: habitat loss and fragmentation, flora and fauna, in addition to impacts on aquatic and riparian ecosystems, and impacts on the biodiversity of soil, with elaboration on direct, indirect, and cumulative impacts as stated earlier.
- (3) Surface water and catchment areas.
- (4) landscape (e.g. topography, land use, erosion, drainage, etc.)
- (5) Project related pollution (routine, non-routine, accidental) such as solid waste, toxic and hazardous waste (), effluents and discharges, leakages, spills, run-off, noise soil, and air.
- (6) Natural disaster risks: landslides, flooding, erosion, earthquakes, etc.
- (7) Building on the data collected under sections 3.2 and 3.3, the Consultant shall articulate the social context for the project, focusing on physical, demographic and social changes; and identify groups and agencies that are directly concerned by the proposed investment, the various roles played by different stakeholders over time, their inter-relationships, and any conflicts among stakeholder groups that may undermine the implementation of the proposed investment.
- (8) Local population, economic activities, creation of employment, impacts on livelihoods, loss of agricultural and residential land, risks of sexual exploitation, abuse and sexual harassment (SEA/SH) arising from project activities, landfills workers management procedures.
- (9) Health and security of the workers and local population (cumulative health risks, accident risks, noise and air pollution etc.)



3.4.5. Livelihood Impacts and Restoration Measures

Landfill construction, operation, and expansion may result in temporary or permanent impacts on surrounding agricultural lands and associated livelihoods. Potential impacts include reduced crop productivity due to dust deposition and nuisance odors, potential contamination risks affecting soil and irrigation water, and disturbance to farming activities due to increased traffic and operational activities. These impacts may lead to temporary or permanent loss of income for affected farmers, tenants, sharecroppers, and agricultural workers. In one of the sites (Zahrat Al-Finjan) measures were taken by the operators as provided in the environmental and social audit conducted in August 2024, however the Consultant is required to update the information provided in the audit report and provide a livelihood impacts and restoration measures given the cumulative impact assessment resulting from the assessment process under point (8) of section 3.4.4, by tailoring a livelihood restoration plan focusing on (i) number of affected farmers identified and supported; (ii) trends in crop yields in adjacent agricultural plots; (iii) number of livelihood-related grievances received and resolved; and (iv) satisfaction of affected farmers with restoration measures. Monitoring results shall be reported as part of a separate ESMP reporting concerning the owner/operator of the facilities (JSC) – or within the ESMS in section 3.5, to distinguish it from the ESMP addressing construction activities implemented by private contractors.

3.4.6. Environmental and Social Management Plan (ESMP)

The Consultant is required to prepare detailed ESMPs to be implemented during the various activities for both sites and shall present them as a stand-alone document to be annexed to bidding documents resulting from the detailed design addressing the construction works. The ESMP shall address and integrate the corrective action plan recommended in the Environment and Social Audit, and shall identify the following:

- (1) The required actions/measures needed to mitigate environmental and social impacts of concern to include list of potential impacts and necessary mitigation measures, roles and responsibilities for implementation, supervision, monitoring strategies and indicators, cost estimates and allocation of financing responsibilities.
- (2) As part of the ESMP, the Consultant should prepare Labor Management Procedures (LMP), including, inter alia, provisions on working conditions, management of workers relationships, occupational health and safety (including hazards risk assessment, personal protective equipment, and emergency preparedness and response), code of conduct (including relating to SEA and SH), forced labor, child labor, grievance arrangements for Project workers, and applicable requirements for contractors, subcontractors, and supervising firms.
- (3) Occupational health and safety plan principles including occupational hazards assessment, application of OHS mitigation hierarchy, training, housekeeping, personal protective equipment, incident notification and management.
- (4) Monitoring program that includes a detailed plan to monitor the implementation of mitigation measures and the impacts of the project during the pre-construction, construction and operational and maintenance phases. The monitoring plan will also consist of monitoring strategies, indicators, cost estimates of the proposed monitoring



measures, the key parties/institutions that are proposed to be responsible for undertaking the monitoring as well as the oversight responsibilities for correct implementation of the monitoring function and implementation of the mitigation measures.

- (5) Tailored ESHS procedures and mitigation measures shall be developed specifically to govern landfilling operations during construction, recognizing that post-construction operations will be guided by a landfill operations manual prepared primarily under the design assignment, with technical input from the Consultant under this ToR.
- (6) SEA/SH Action Plan should be developed as part of the ESMP based on the assessment of the SEA/SH risks. This should include all appropriate measures to prevent and respond to SEA/SH cases as per good practices¹.

3.5. Environmental and Social Management System (ESMS)

The above shall be under the umbrella of an Environmental and Social Management System (ESMS) to be prepared by the Consultant, considering the following requirements:

- (1) The ESMS will mainly set out the institutional structure and propose the strengthening measures required to ensure what, who, and how the mitigation and monitoring will be implemented.
- (2) The ESMS will review the capacity of the JSCs, being the owner and operator of both sites, and recommend steps to strengthen them so that the management and monitoring plans can be implemented. This may include hiring of staff, training and capacity building programs, and hiring of consultants.
- (3) The costs and sources of funds for the proposed measures and any training requirements for capacity building in the field of environmental and social safety measures should be specified.
- (4) The Consultant shall prepare the ESMS in alignment with the Operational Manual of both sites that will be prepared under the detailed design assignment, and shall also address the following:
 - E&S Policy
 - Legal compliance register
 - ESMP
 - OHS Management System
 - Leachate Management SOP
 - Landfill Gas Management Plan
 - Fire & Explosion Prevention Plan
 - Emergency Response Plan
 - Traffic Management Plan
 - Community grievance mechanism
 - Monitoring & reporting framework
 - Labor Management Procedures (LMP), to include but not limited to workers' grievance mechanism and code of conduct.

¹ Refer to [Good Practice Note for Addressing Sexual Exploitation and Abuse and Sexual Harassment \(SEA/SH\) in Investment Project Financing involving Major Civil Works](#).



- Occupational Health and Safety (OHS) Plan including emergency preparedness and response plan.
- Community Health and Safety Plan including traffic safety, access control, and emergency response.
- Waste Management Plan including hazardous and non-hazardous waste acceptance and handling.
- SEA/SH risk mitigation measures/Plan proportionate to project risk profile.

3.6. Environmental Approval, Permitting Process, and ESIA Compliance Requirements

This section should also include procedures to be followed and the necessary documentation for obtaining all required environmental approvals, permits for starting work, operation and maintenance of the project. The application process should include the parties' responsibilities for each step, required documentation and content of documentation as well as the timeline for permitting process. This documentation will be prepared considering the detailed design permitting process. The permitting requirements should be clear up front so that the ESIA process can be designed to deliver the most appropriate outputs at the appropriate time. The Consultant should make sure that the ESIA process meets the needs and requirements of the Palestinian Authority (EQA) environmental approval procedure in accordance with the Palestinian Environmental Assessment Policy. Therefore, the Consultant is required to develop the application for the environmental permits, which will be finalized and submitted to EQA to obtain environmental approval. The Consultant shall adhere to EQA requirements including using Arabic language in official applications and documents.

4. Deliverables

The duration of assignment will be 5 months starting from contract signature. It shall be noted that part of the data collection and assessment is associated with the separate parallel assignment, the detailed design of both landfills, therefore the Consultant shall accommodate time given for revisions in both assignments (ESIA and Detailed Design), and that necessitates a close, professional, and timely follow up. The indicated duration is based on the anticipated time for delivering the preliminary and detailed design, and the Consultant shall be able to work on each site separately and at different speeds depending on emerging design documents. The Consultant shall submit the following deliverables, each prepared to a standard suitable for review, disclosure, and implementation, accommodating the feedback and remarks provided by the client and its financing partner (World Bank) and concerned line ministries (EQA) to consider the deliverable acceptable; that is the Consultant is responsible to make all required revisions. Timeline, language of deliverables (Arabic, English, or bilingual), and disclosure arrangements shall be confirmed by MDLF in line with the Environmental and Social Commitment Plan (ESCP) requirements. All deliverables shall be technically robust, internally consistent, and aligned with the outputs of the parallel landfill design assignment:

- 4.1. Inception Report:** shall be presented within two (2) weeks from contract commencement and should include detailed understanding of the assignment scope and objectives with confirmed methodology and workplan for the assignment.



- 4.2. Baseline Data Zahrat Al-Finjan Sanitary Landfill:** shall be presented within eight (8) weeks after commencement of the Services, covering the aspects indicated in sections 3.1, 3.2, and 3.3 of this ToR.
- 4.3. Baseline Data Al-Minya Sanitary Landfill:** shall be presented within eight (8) weeks after commencement of the Services, covering the aspects indicated in sections 3.1, 3.2, and 3.3 of this ToR.
- 4.4. Draft ESIA Zahrat Al-Finjan Sanitary Landfill:** shall be presented within sixteen (16) weeks from contract commencement, in addition to drafts of stand-alone ESMPs for each major works contract as identified in the detailed design for bidding, and the livelihood restoration plan (LRP), section 3.4.5, with an outline of the ESMS under section 3.5.
- 4.5. Draft ESIA Al-Minya Sanitary Landfill:** shall be presented within sixteen (16) weeks from contract commencement, in addition to drafts stand-alone ESMPs for each major works contract as identified in the detailed design for bidding, and the livelihood restoration plan (LRP), section 3.4.5, with an outline of the ESMS under section 3.5.
- 4.6. Final ESIA Zahrat Al-Finjan Sanitary Landfill:** shall be presented within twenty (20) weeks from contract commencement. Report and annexes shall be provided in English and technical executive summary in Arabic, and shall be suitable for public disclosure, in addition to stand-alone ESMPs for each major works contract as identified in the detailed design for bidding, and the livelihood restoration plan (LRP), section 3.4.5. The final ESIA should be submitted in 4 hard copies and 1 electronic copy.
- 4.7. Final ESIA Al-Minya Sanitary Landfill:** shall be presented within five (5) months of the contract commencement. Report and annexes shall be provided in English and technical executive summary in Arabic, and shall be suitable for public disclosure, in addition to stand-alone ESMPs for each major works contract as identified in the detailed design for bidding, and the livelihood restoration plan (LRP), section 3.4.5. The final ESIA should be submitted in 4 hard copies and 1 electronic copy.

5. Duration of the Assignment

The expected duration of the assignment is to be 5 months.

6. Communication and Coordination

The Consultant shall maintain continuous communication with the MDLF to ensure a clear understanding of all deliverables, and close coordination with the Detailed Design Consultant. As deliverables require clearance from national line ministries (MoLG, EQA), Joint Service Councils, and the World Bank, the Consultant shall participate in in-person and virtual meetings to present outputs and alternatives and make revisions in accordance with the feedback received from the parties involved.

The Consultant shall report to MDLF, which has overall responsibility for contract management and coordinate with the Design Consultant to ensure ESIA requirements resulting from this assignment are fully integrated into layout drawings, design assumptions, and technical specifications. A coordination protocol shall be established among the different teams to ensure consistent integration of ESHS considerations across design, supervision, and construction, and



ensure clear procedures and timelines for information exchange, documentation sharing, and technical review among all parties.

7. Personal Data Protection and Use

The Consultant shall collect and process personal data of stakeholders/participants of consultations only as necessary for ESIA/SEP preparation and related project activities, in line with ESS10 and good international practice. Personal data includes any information identifying an individual (e.g., names, contacts, images, recordings, affiliations, or opinions linked to a person). The Consultant shall: (i) minimize collection and prioritize aggregation/anonymization; (ii) provide notice at engagements on what data is collected, purpose, use and retention, and seek consent for recordings and any optional uses (e.g., mailing lists); (iii) protect data through appropriate technical and organizational safeguards and secure transfer to MDLF/JSCs; (iv) not share or use data for other purposes or with third parties without prior written MDLF approval and, where required, participant consent; (v) report consultation results in aggregated/de-identified form unless explicit consent is obtained for attribution; (vi) follow an MDLF-approved retention/deletion schedule; at assignment close, transfer all originals to MDLF and securely delete/de-identify Consultant copies; (vii) provide a channel for data access/correction/deletion requests and address them with MDLF; and (viii) ensure subcontractors comply with these obligations.

All consultation records and materials are the property of MDLF. The Consultant shall not publish, disseminate, or use participant data or consultation content outside this assignment without MDLF's prior written approval.

8. Qualification Requirements

The Consultant must include details of proposed key team members assigned to work on this consultancy, namely: an overview of team roles, division of labor amongst the team and percentage of working time spent by each team member. The team should be sufficiently staffed to provide the expertise and support skills required in the following areas as well, which may be needed depending on the finding during and completing the ESIA:

- Solid waste including hazardous materials and waste
- Occupational health and safety
- Pollution reduction and management,
- leachate treatment, landfill gas control, emissions and ground and surface water impacts
- Social development specialist with track record in livelihoods restoration, labor management, managing risks related to SEA/SH, stakeholder engagement & grievance mechanisms

The Consultant Firm should have at least ten years of experience in carrying out environmental and social impact assessments, feasibility and design studies and construction management, of similar projects, with specific experience in ESIA and LRP for rehabilitation and construction for major landfill projects internationally and in the MENA region.

The team of technical, environmental and social experts shall meet the qualifications specified below. The team is required to be fluent in English, while knowledge of Arabic is an asset.



8.1. Qualification of Key Personnel

key staff throughout the implementation of deliverables:

- (1) **Team Leader:** Team leader, expert in ESIA, with a minimum of 10 years of experience as multidisciplinary team leader for ESIA, with sound knowledge of ESIA methodologies, environmental mitigation and monitoring plans, legislation and donor policies relevant for the environmental management of the project, specifically, the World Bank ESF. Experience in development contexts and in the MENA region will be considered an asset.
- (2) **Environmental Specialist:** MSc in environmental science, Environmental Engineering, or related field, with a minimum of 10 years of experience in environmental assessments following the World Bank ESF including land, soil, and groundwater studies, leachate management, gas emissions, air quality, noise, and odor assessment, and waste characterization and handling, in addition to experience in field sampling, monitoring, and environmental modeling.
- (3) **Social Specialist:** Master's in sociology, social sciences, anthropology, or related field, with a minimum of 10 years of experience in the World Bank ESF, with focus on social impact assessments, stakeholder mapping, and community engagement, resettlement, livelihood restoration, SEA/SH, vulnerable groups, labor management, and public consultation requirements, in addition to proven track record in preparation of Social Management Plans (SMP) and Stakeholder Engagement Plans (SEP), and grievance mechanisms.
- (4) **Hydrogeologist / Water Resources Specialist:** minimum BSc. Degree in hydrogeology, geology, civil engineering, or environmental engineering, with a minimum of 10 years of experience in groundwater and surface water impact assessment, leachate migration modeling, and monitoring, in addition to experience in the design and implementation of water sampling programs and assessment of surface and groundwater related risks from landfills construction and operation.
- (5) **Industrial Wastewater Treatment Expert:** minimum MSc in environmental, chemical, or sanitary engineering, with minimum of 10 years of professional experience in wastewater treatment system design and assessment, proven experience in landfill leachate characterization and treatment including design, upgrading, or performance evaluation of biological, physico-chemical, and/or membrane-based systems, working for at least two similar landfill projects involving expansion, rehabilitation, or system upgrade, in addition to experience in assessing compliance with national regulations and applicable international standards, including the World Bank Group EHS Guidelines.
- (6) **Waste Management Specialist:** minimum BSc degree in mechanical or Sanitary Engineering or equivalent, with a minimum of 10 years of experience in landfill design, leachate and gas management and treatment systems, in addition to experience in the preparation of standard operations procedures and operational manuals.
- (7) **Occupational Health and Safety Specialist:** minimum BSc degree in occupational health, safety engineering, environmental health, or related field, with a minimum of 7 years of experience in assessing health and safety risks in landfill operations, with knowledge of hazard identification, risk assessment, and mitigation measures for workers and communities, in addition to the ability to prepare OHS plan for landfills



- (8) GIS / Data Analyst / Illustrator:** Degree in GIS, Geography, or related field, with a minimum of 5 years of experience in spatial analysis, mapping sensitive receptors, land use, and environmental monitoring. Ability to integrate environmental and social data into GIS maps for the ESIA, and proven skills in photo editing and illustration for generating robust exhibits and maps showcasing and relating design elements with risks and mitigation measures, among others.

Note: Consultant is expected to have access to different backstopping pool of experts addressing particular areas as needed such as biodiversity conservation and natural resources management expert, health expert, energy expert, agricultural expert.

9. Payment Schedule:

Payments for this assignment will be made upon the acceptance of the Client (MDLF) and will be arranged according to the following:

Payment (1): 10% of the contract value will be paid after submission to and approval by the MDLF of the Inception report.

Payment (2): 30% of the contract value will be paid after submission to and approval by the MDLF of the draft ESIA and associated plans.

Payment (5): 60% of the contract will be paid after the submission to and approval by the MDLF of Final ESIA and associated plans.

10. Selection of Consultants and Contracting

Consultants will be selected in accordance with Quality and Cost Based Selection (QCBS) procedures of the Guidelines for the Selection and Employment of Consultants by World Bank Borrowers. Procurement for this consultancy service assignment will be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers, Sixth Edition February 2025, first published in July, 2016; and the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD loans and IDA Credits and Grants" dated January 2011.

The Contract shall be lump sum (task-based), inclusive of all professional fees, reimbursable expenses, workshop costs, travel, accommodation, and any other associated expenses.

Payments shall be linked to the satisfactory completion of each task, in accordance with the approved work plan.

The Consultant shall submit a detailed work plan outlining the proposed methodology, activities, deliverables, implementation schedule, and the corresponding all-inclusive costs for each task, for review and approval by the Client.



The duration of the assignment shall be twenty (5) months, commencing from the date of issuance of the Authorization to Start Services.

11. Relevant Documents

The following documents are essential for the assignment:

- (1) Environment and Social Audit Report for Zahrat Al-Finjan Sanitary Landfill:
[https://www.mdlf.org.ps/Document/Zahrat%20Al%20Finjan%20Landfill%20ES%20Audit.docx%20\(1\)-compressed.pdf](https://www.mdlf.org.ps/Document/Zahrat%20Al%20Finjan%20Landfill%20ES%20Audit.docx%20(1)-compressed.pdf)
- (2) Environment and Social Audit Report for Al-Minya Sanitary Landfill:
<https://www.mdlf.org.ps/Document/AlMinya%20Landfill%20ES%20Audit.docx.pdf>
- (3) ESCP:
[https://www.mdlf.org.ps/Document/ISWMP%20ESCP%20Negotiation\(1\).pdf](https://www.mdlf.org.ps/Document/ISWMP%20ESCP%20Negotiation(1).pdf)
- (4) SEP:
[https://www.mdlf.org.ps/Document/SEP-Solid%20Waste%20Management%20Project\(2\).pdf](https://www.mdlf.org.ps/Document/SEP-Solid%20Waste%20Management%20Project(2).pdf)

Other documents will be available for the selected Consultant upon request.