

FINAL

AECOM

Mezitli Wastewater Treatment Plant

Revised Environmental and Social Action Plan (ESAP)

October 2017

Issued by:

Mersin Water and Sewage Administration (MESKI)

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1. Environmental and Social Action Plan

Environmental and Social Action Plan (ESAP) for Mezitli Wastewater Treatment Plant in Mersin, Turkey is presented in Table 1-1 below.

Table 1-1 Environmental and Social Action Plan for Mezitli Wastewater Treatment Plant

No	Action	Environmental & Social Risks, (Liability, Benefits)	Requirement Legislative, EBRD PR, Best Practice	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria for Successful Implementations	Annual Status Update
1	PR 1: Environmental & Social Appraisal & Management						
1.1	MESKI to develop and attain ISO 14001 Environment Management System and OHSAS 18001 Occupational Health and Safety Management System certificates.	Mitigation of environmental risks.	EBRD PR1 Voluntary and best practice ISO 14001 OHSAS 18001	Costs: Management time Independent third party About 20.000 Euro Responsibility: Quality Management Center Branch and Treatment Plants Department of MESKI	2Q 2018	ISO 14001 Environment Management System Certification OHSAS 18001 Occupational Health and Safety Management System certificate	
1.2	MESKI to develop SA 8000 management system to ensure social compliance within the institution. It is also recommended to attain certification.	Mitigation of social risks	EBRD PR1 Voluntary and best practice SA 8000	Costs: Management time Independent third party About 20.000 Euro Responsibility: Quality Management Center Branch and Treatment Plants Department of MESKI	SA 8000 by 2020	SA 8000 certification	
1.3	Develop an asset management plan (PAS55, ISO55001 or equivalent) to ensure a structured maintenance regime has been developed and is followed. In particular such maintenance plans should consider emergency/contingency arrangements for plant outages	Maintenance of environmental compliance and assurance to local communities Management of community expectations	EBRD PR1	Costs: Management time Responsibility: MESKI	2019	Asset Management Plan in place	
2	PR 2: Labour and Working Conditions						
2.1	Ensure that EPC revise their HR Policy and update their	Management of employee	Employment laws	Costs:		HR Gap analysis	

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	HR procedures in line with EBRD PR2 outlining their principles with respect to: <ul style="list-style-type: none"> worker rights working conditions, including fair treatment, non-discrimination and equal opportunities of workers worker-management relationship freedom of association safety and health of workers forced labour and child labour. Worker accommodation camp (if valid) 	relations	EBRD PR2	Management Time Own resources Responsibility: Quality Management Center Branch and Treatment Plants Department of MESKI and the contractor	December 2017	and updated HR procedures to be submitted to EBRD as part of AESR	
2.2	Ensure that all workforce (MESKI, Contractor and sub-contractors) on the Site are communicated on the HR Policies and procedures.	Good human resources management and a sound worker-management relationship. Enhanced efficiency and productivity in overall accomplishment of project objectives.	EBRD PR2 National Labour Law (No. 4857) Good international industry practice	Costs: Management time Own resources Responsibility: Investment and Construction Department of MESKI and the contractor	December 2017 - continue throughout the construction and operation phases	Signed minutes of meeting on HR Policy communicated with the workforce on the Site.	
2.3	Ensure that the grievance mechanism is accessible to all workers (including contractor workers) at all times and all internal grievances and associated actions are recorded.	Good human resources management and a sound worker-management relationship. Handling of complaints on time.	EBRD PR2 Voluntary and best practice	Costs: Management time Responsibility: Investment and Construction Department of MESKI	December 2017 - continue throughout the construction and operation phases	Register of completed formal grievances. Grievance forms and records of resolutions.	
2.4	Develop a Contractor Monitoring Programme which will ensure: <ul style="list-style-type: none"> verification of proper accident reporting verification of training and professional credentials for contractor EHS staff verification of labour conditions (social security, minimum wage, working hours, no child/forced labor etc.) through monthly employee standards audits. Prior to start of operations, revise the programme to	Risk of poor relationship with the employees and media exposure.	EBRD PR 2 and PR 4	Costs: Management time Own resources Responsibility: Investment and Construction Department of MESKI and the contractor	4Q 2017 - continue throughout the construction and operation phases	Monitoring programme Inspection/audit records Labour audits records-employment	

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	cover all staff working for the operation of the WWTP					documentation	
2.6	Conduct a safety risk assessment for all operational activities of the project including risks associated with the storage of CH ₄ , H ₂ S, FeCl, etc., and implement any identified risk mitigation actions and controls. Regularly update the risk register and review the effectiveness of the control measures	Better implementation of occupational health&safety Minimize potential risks of accidents due to operational activities	EBRD PR2, PR4	Costs: Management time Responsibility: Investment and Construction Department of MESKI	Before start of operation Annual review and update	Risk assessment document Operational safety risk register and risk controls H&S management plan	
3	PR 3: Pollution Prevention and Abatement						
3.1	(a) Enclose and connect the Aerated Grit Chamber and PSTs to odour removal unit. (b) Agree on an odour monitoring regime and limit criteria to trigger further mitigation measures with the EBRD and carry out odour monitoring during the first year of operation to measure the odour emission rates from the Aeration Tanks and Bio-Phosphorus Tanks. This will be a twin-track air-emissions (odour) monitoring approach – 1) a frequent check of odour at strategic points using hand-held monitors complemented with 2) odour emission rates at the Aeration Tanks and Bio-P tanks. (c) In case the emission rates used in the modelling are consistently exceeded and odour is detectable beyond the site boundary, then enclose the Aeration Tanks and Bio-Phosphorus Tanks. (d) Maintain an odour complaints log on site to record any odour complaints that are made by local residents. (e) Prepare an odour mitigation plan for the site detailing any measures what should be implemented to minimize off-site odour nuisance	Better implementation of the environmental management. Minimize potential risks associated with odour	EBRD PR 3 Voluntary and best practice	Costs: Management time Independent third party Up to 1 million Euro for the closure of AGT and PSTs About 1000 Euro for each emission rate measurement point The cost for the enclosure of the Aeration Tanks and Bio-Phosphorus Tanks is subject to the prefeasibility study Responsibility: Investment and Construction Department and Treatment Plants Department of MESKI and the contractor	(a) July 2018 (b) From January 2018 till January 2019 (c) July 2019 (d) Starting from January 2018 (e) March 2019	Odour Measurements Odour Mitigation Plan	

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	(f) This exercise should be repeated once phase 2 of the works is open.				(f) Prior to any Phase 2 works		
3.2	Construction of new residential structures at around 60 meters to the east of the project site has been on-going. Additionally there is another residential building at 14 m to the project site and it is also under construction phase. The noise level at the building which is at around 60 m distance is measured as 75.6 dBA. In the case the construction of the buildings are completed before the completion of the treatment plant construction and people begin to live at that building, conduct noise measurements to determine whether the noise level at the building exceeds the limits or not. In the exceeding case conduct noise assessment study in order to define mitigation measures and implement measures to reduce the noise levels to comply with the Turkish and IFC noise standards at the receptors.	Better implementation of the environmental management. Minimize potential risks associated with the subcontracted facilities and operations.	EBRD PR 3 Voluntary and best practice	Costs: Management time Independent third party About 3000 Euro – noise measurements About 7000 Euro- noise assessment Responsibility: Investment and Construction Department and Treatment Plants Department of MESKI and the contractor	After the construction of the building is completed, during on-going construction of the treatment plant	Grievance records Noise measurement reports	
3.3	Sign agreements with licensed waste disposal companies for collection, transport and disposal of hazardous and non-hazardous wastes.	Better waste management Risk of non-compliance with the environmental legislation	EBRD PR3 Local compliance	Costs: Management time and expenditure for the proposed improvements About 10000 Euro Responsibility: Investment and Construction Department Treatment Plants Department of MESKI	4Q 2017- continue throughout the construction and operation phases	Appropriate pollution prevention measures in place	
5	PR 5: Land Acquisition, Involuntary Resettlement and Economic Displacement						
5.1	Establish a regular (annual) consultation mechanism to monitor the livelihood restoration of affected households after the compensation payments are made in line with PR2 and if necessary, advise and support the affected people with regards to improvement of their livelihood	Respect for human rights ensured. Adverse social and economic impacts from restrictions on affected persons' use are	EBRD PR5	Costs: Management time Responsibility:	4Q 2017: Once with each affected person.	Consultation process documented.	

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	activities.	mitigated.		Investment and Construction Department and Property and Expropriation Department of MESKI			
5.2	Inform each of the eight affected people that a corporate level grievance mechanism is accessible and that they can state their specific concerns about compensations.	Respect for human rights ensured. Adverse social and economic impacts from restrictions on affected persons' use are mitigated.	EBRD PR5	Costs: Management time Responsibility: Investment and Construction Department and Property and Expropriation Department of MESKI	Disclosure of information: 4Q 2017, once off. Grievance: 4Q 2017, continuous.	Information disclosure documented. Grievance forms and tracking forms provided at disclosure.	
10	PR 10: Information Disclosure and Stakeholder Engagement						
10.1	Undertake engagement activities as described in the SEP.	Open and transparent engagement between the client, its workers, local communities.	EBRD PR 10	Costs: Management time Responsibility: Public Relations Branch Department of MESKI	Continuous at all stages.	Engagement activities documented.	
10.2	Provide a continuous public disclosure about the potential environmental and social impacts, mitigation measures, monitoring system and grievance mechanism. Share information about the operational activities and environmental technology used at the WWTP on regular basis on the website and/distribute leaflets to the new residents around the WWTP.	Risk of poor relationship with the local community and stakeholders and regulators if disclosure is practiced inadequately.	EBRD PR 10	Costs: Management time Responsibility: Public Relations Branch Department of MESKI	On regular basis at all key stages of the project.	Regular update of the public about the progress of the project.	
10.3	Establish a project-based grievance mechanism and encourage use of the mechanism by the public. Coordinate the mechanism with the hotline "Alo 185" or	Good industrial practice. Good community relations.	EBRD PR 10	Costs: Management time	Continuous at all stages.	Monthly Monitoring Report on grievances and	

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	the corporate grievance procedure. Make the project-specific grievance mechanism accessible at all times for a review of grievance received, recorded, resolved and tracked, as related with the Project.			Responsibility: Public Relations Branch Department of MESKI		resolutions.	
10.4	Establish a participatory monitoring mechanism and share information on ES issues/ monitoring results with the community members, representatives (this is critical to avoid future complaints from the residents in future)	Good industrial practice. Good community relations. Transparency and good governance	EBRD PR 10	Costs: Management time Responsibility: Public Relations Branch Department of MESKI	Operations phase	Quarterly or bi-annual meeting with the Participatory Monitoring Committee (frequency shall be determined based on the needs of the community members)	

2. Implementation and Monitoring of the ESAP

2.1 Organizational Capacity

MESKI has established and maintained an organizational structure and strengthen its capability (i.e. budget or professional staff) in order to implement mitigation measures and monitoring activities effectively. This includes the followings:

- Specific personnel on site or at the administrative level will be designated. Their responsibilities will be well defined.
- Sufficient human and financial resources will be provided to achieve effective and continuous social and environmental performance.
- The Operator will assess the capability of the designated personnel and ensure they are adequately qualified. If necessary the personnel will be trained so that they have the knowledge and skills necessary to perform their work.

MESKI designated personnel to implement ESAP and monitoring activities according to the assignment letter dated February 13, 2017.

There are no specific personnel defined for human resources or community relations in MESKI. However MESKI has Media, Publications and Public Relations Department in its main organizational structure. This department is responsible for all human resources and community related activities.

For the operation phase, the Operator will be responsible for following up the ESAP requirements. Therefore, there should be designated personnel in the organizational structure of the Operator who will be responsible for implementing ESAP requirements. These personnel will also be responsible for coordination with the Environmental Consultant to be hired by the Operator for monitoring studies which is also explained in the following sections. The contractor management which will be needed for the construction phase is presented below.

2.2 Managing Contractors

Although it is the Operator's responsibility to implement this ESAP, many contractors and subcontractors will be working on site during the construction phase. Therefore, the Operator will ensure that all contractors are fully aware of this ESAP's requirements and meet the requirements set out in this ESAP. For this reason, the followings will be done for an effective contractor management:

- Environmental and social risks associated with contracts will be assessed.
- Tender documents will include relevant PRs and ESAP requirements and capable contractors will be hired to meet the requirements.
- Contractors will be ensured to have knowledge and skills to perform their tasks in accordance with the PRs and ESAP requirements.
- Contractors will be monitored for the compliance with the requirements.
- Subcontractors of the contractors will be required to have similar arrangements.

2.3 Performance Monitoring

The Operator will establish procedures to monitor the implementation of this ESAP. The Operator will be required to hire qualified and experienced specialists to perform periodic monitoring throughout the life of the EBRD's involvement with the project. Monitoring results will be documented to the EBRD and based on these results the Operator will carry out necessary corrective and preventive actions. It may be necessary to revise the original ESAP, therefore amended ESAP and/or offset programme will be submitted to the Bank for approval. As EBRD's Environmental and Social Policy (2008) requires, the Operator will visit the project site by the EBRD's environmental or social specialists, or consultants acting on the EBRD's behalf.

