Gürmat 2 Geothermal Power Plant, Aydin Germencik - Environmental and Social Action Plan

No.	Action	Environmental Risk, Liability / Benefit	Legislative Requirement / EBRD / Good practice	Investment Needs / Resources Costs	Timetable Action to be Completed	Target and Evaluation Criteria For Successful Implementation	Comment
1	 Environmental, Health & Safety and Social (EHSS) Management System: Establish and implement an EHSS management system (ESMS) and associated operating procedures for project operations based on the requirements of ISO 14001 and OHSAS 18001. In particular, the ESMS shall include: EHSS Management Plan, incorporating key operational procedures on Hazardous Materials Management, Solid & Liquid Waste Management, Emergency Response, and Community Grievance Redress EHSS training of staff and contractors. The Company will establish a grievance mechanism for stakeholders including staff and third parties. 	Clear responsibilities and enforcement abilities.	PS 1/PR 1	Own resources plus external support if required	Prior to commissioning of EFE 1.	EHSS Management procedures implemented and evidence of formalised routine monitoring of EHSS issued by management. Clear rules are agreed and confirmed by involved parties. Formal certification in 2015	
2	 EHSS Monitoring: Gürmat shall: Establish and implement routine monitoring procedures covering H2S (hydrogen sulphide), noise, grievance redress, OHS statistics and waste management. Provide information to the Lenders on any serious accidents and incidents. 	Report to Lenders on project implementation.	Lenders requirement		Annual report to the Lenders.	Report to Lenders	
2	EHSS Capacity: Appoint an experienced person responsible for management of EHSS matters during operations.	Need to have on site EHS manager to deal with EHS issues, grievance requirements and ensure best practice implemented	PS/PR 1, Turkish regulations	One full time employee	Prior to operations commencing	EHSS Officer appointed in the Gürmat 2 GPP.	Confirm OHS Officer present already for construction

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3	 Occupational Health & Safety (OHS) Gürmat shall: Develop/implement Risk Assessments (RAs) and Safe Operating Procedures (SOPs) Monitor OHS performance on an ongoing basis and report output (KPIs such as Lost Time Incidents) to Lenders on an annual basis 	Need to ensure compliance with international and national OHS standards	Turkish legislation, PS 2/PR 2	GÜRMAT 2 GPP and consultant support	Start of construction and revision for operation	Develop andimplement RAs and SOPs and update periodically as required. Part of the annual report to the Lenders.	Use of internal and/or external specialists. Consideration should be given to emission of H ₂ S.
4	 Labour & Working Conditions: Gürmat shall: Modify HR policies as necessary in accordance with PS/PR 2 requirements and communicate to employees. Establish a health and safety committee Develop and implement a worker grievance mechanism, including all direct employees, contractors and subcontractors 	To ensure compliance with Turkish regulations and GIIP.	Turkish legislation, PS 2/PR2 and GIIP	GÜRMAT 2 GPP	Prior to the operational phase	HR policies (endorsed by senior management) and Procedures prepared and terms of appointment provided.	Use of internal resources and external HR advisors.
5	Greenhouse Gas (GHG) Emissions: Gürmat shall provide a detailed breakdown of GHG emissions to Lenders on an annual basis, including an update on the success of any supplemental measures taken to reduce emissions. Data will include details of emission per kWh and per MWh as well as total carbon emissions.	GIIP	Lender requirement.	Own resources	Annually in December.	Part of the annual report to the Lenders.	The report should also comment upon the progress and success of any CO_2 collection adopted at the Gürmat and the Gürmat 2 GPP facilities.
6	Within 3 years of operations undertake a review of whether GHG emission can be	The report will review if it is possible to further reduce	Lender requirements	Own resources plus	2017	Report Lenders	

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	reduced from the plant, and prepare a report to be presented to Lenders on options available.	GHG emissions		externalsupport if required			
7	 Within three years of commissioning EFE 1 and 4 (Phase I) undertake an EHSS audit that will include: Review and verify carbon emissions Review and verify noise impacts (including monitoring) Review and verify hydrogen sulphide emissions Review grievance procedure as well as land allocation and use Review implementation of SEP and SIC The Report will include recommendations, which will be discussed and agreed with the Lenders and the Company and implemented by the Company to ensure compliance with the ESAP and Loan agreement conditions. 	The commissioning report will review how the plant has been developed, and whether the ESAP and EIA requirements have been met.	Lender Requirement	External advisor	Within three years of commissioning EFE 1 and 4.	Report to Lenders on status of compliance and recommendations	
8	ESIA disclosure package to be disclosed locally and on web site throughout the life of the Project. Implement the requirements of the Lenders ESIA disclosure package and National legislation. Provide an update on the implementation of the SEP and Social Impact Assessment (SIC)	The Lender ESIA disclosure document contains information on the project design and implementation as well as compliance. This will be used to benchmark the plants EHSS performance	Lender requirement	Internal	ongoing	Report available on line	The Lenders ESIA disclosure document may be updated only on the basis of consent of all Lenders