

Appendix B: Environmental and Social Action Plan

NO.	ACTION	ENVIRONMENTAL & SOCIAL RISKS (LIABILITY/BENEFITS)	REQUIREMENT (LEGISLATIVE, EBRD PR, BEST PRACTICE)	RESOURCES, INVESTMENT NEEDS, RESPONSIBILITY	TIMETABLE	TARGET AND EVALUATION CRITERIA FOR SUCCESSFUL IMPLEMENTATION	STATUS
PR1 Assessment and Management of Environmental and Social Impacts and Issues							
1.1.1	Develop and implement an EMS aligned to ISO 14001. This should be adopted at corporate level and fully implemented at the MPF site to include an audit program for the EMS and legal compliance to be undertaken by an external consulting company to identify gaps and opportunities for Improvement.	Optimisation of environmental and social management through a formalised system.	EBRD PR1 Voluntary and best practice	Own resources and /or external consultants (cost dependent on extent of support)	Implemented within 18 months of full operation	Develop and implement an EMS Annual EHS Report to the Bank	
1.1.2	Ensure that all relevant information and requirements contained within the ESAP, EIA, Permits and any supplementary studies are cascaded to relevant construction, EPC contractors and third parties handling waste, wastewater management to ensure fully effective implementation on projects and adherence to environmental limits. This should be included in key contractual documents.	Management of environmental and social issues on projects	EBRD PR1 Voluntary and best practice	Own resources	Prior to finalisation of any major construction/EPC project.	Evidence of cascade to be maintained on record.	
1.1.3	Undertake an Environmental and Social Impact Assessment, with required consultation and disclosure processes for any future project agreed EBRD to be classified as a Category A projects.	Implementation of the EBRD Policies.	EBRD PR1	Own resources and external consultants	Prior to any further progression in project planning	Categorisation agreement with EBRD. Full ESIA disclosure in line with EBRD Policy requirements and ESIA standards.	
PR2 Labour and Working Conditions							
2.1.1	Develop and adopt Human Resource Policy and management system covering all employees, contractors and sub-contractors, to include (but not be limited to): <ul style="list-style-type: none"> ■ Approach to managing its 	To ensure management of workforce in line with EBRD requirements to include coverage of such areas as the continued prevention of child labour and forced	EBRD PR2 Labour law	Own resources	End of 2017	Written HR policies compliant with EBRD PR2 Contractor policies/ procedures reviewed/ approved:	

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	<p>workforce</p> <ul style="list-style-type: none"> ■ Management of worker relationships ■ Access to worker's organisations ■ Working conditions and terms of employment ■ Child labour and forced labour policies ■ Equal opportunities and non-discrimination ■ Oversight provided of contractor policies/procedures ■ Access by all workers to policy/procedures in their language(s) 	labour, tolerance of workers associations, retrenchment principles and encouragement of non-discrimination.				<p>prior to work on-site.</p> <p>HR Policies implemented throughout construction and operation.</p>	
2.1.2	Set up and maintain a formal grievance mechanism for employees and contractors and disseminate information about its uses to the workforce	To provide a channel for raising workers' concerns and a transparent, consistent mechanism for resolution.	EBRD PR2	Own resources	April 2016 then Quarterly report to EBRD on grievances and resolutions proposed	Adoption of formal grievance mechanism detailed in the SEP	
2.1.3	Arrangements should be in place for construction workers so that they should have access to welfare facilities such as toilets.	To ensure welfare of workers during site preparation and construction activities.	EBRD PR2	Own resources	Prior to construction activities commencing	Report should be submitted to EBRD detailing arrangements to be put in place for construction workers prior to recommencement of construction.	
PR3	Resource Efficiency and Pollution Prevention and Control						
3.1.1	<p>Ensure where required all EIAs are undertaken in accordance with national and international requirements.</p> <p>General key points include provision of:</p> <ul style="list-style-type: none"> ■ Assessment of impacts of the alternatives 	Management of environmental impacts	EU EIA	Own resources and/or EIA consultant	As required	Completed EIA accepted and assessed by national regulator.	

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	<ul style="list-style-type: none"> ■ Population of nearby settlements (including isolated properties) ■ Landspreading of compost and manure ■ Greenhouse gas emissions and microclimate impacts ■ whether an impact is direct or indirect; short, medium or long term; or permanent or temporary ■ methodology used for impact assessment ■ non-technical summary ■ any difficulties encountered in compiling the required information <p>For all new projects categorised as Annex I under the EU EIA directive.</p>						
3.1.2	Continuous emissions monitoring systems should be fitted for the monitoring of dust from the feed mill at MPF.	Management of environmental impacts	EBRD PR3 Para 8,9 Best Available Techniques	External resources	From commissioning for MPF	Details on when the systems have been installed along with commissioning report and first set of monthly averages should be provided to EBRD.	
3.1.3	MPF should develop monitoring systems for the monitoring of total phosphorous and total nitrogen excreted expressed as kg P ₂ O ₅ excreted/animal place/year and kg N excreted/animal place/year. Ammonia emissions should also be calculated using one of the techniques defined as BAT within the new draft EU BREF for poultry facilities and compared against the BAT-AEL.	Management of environmental impacts	EBRD PR3 Para 8,9 Best Available Techniques	Own resources	June 2016	Details on the calculation methodology and findings should be provided to EBRD.	
3.1.4	A review should be undertaken of the amount of litter to be generated, how	Management of environmental impacts	EBRD PR3 Para 8,9	Own resources	October 2016	Details on the review along with	

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	it will be managed, stored, composted and used/land spread in order to ensure that there is sufficient capacity for the storage, handling and treatment of this waste.		Best Available Techniques			any remedial actions and timescales for these should be provided to EBRD.	
3.1.5	<p>Land spreading should be undertaken in accordance with BAT and:</p> <ul style="list-style-type: none"> ■ minimise the emissions from manure to soil and groundwater by balancing the amount of manure with the foreseeable requirements of the crop. ■ take into account the characteristics of the land concerned when applying manure, in particular soil conditions, soil type and slope, climatic conditions, rainfall and irrigation, land use and agricultural practices, including crop rotation systems. ■ reduce pollution of water by doing in particular all of the following: <ul style="list-style-type: none"> ▪ Not applying manure to land when the field is: water-saturated, flooded, frozen, snow-covered ▪ Not applying manure to steeply sloping fields ▪ Not applying manure adjacent to any water course ▪ Spreading manure as close as possible before maximum crop growth and nutrient uptake occur. ■ managing the land spreading of manure to reduce odour 	Management of environmental impacts	EBRD PR3 Para 8,9 Best Available Techniques	Own resources	December 2016	Details on the procedures, monitoring arrangements, equipment, notification processes and grievance mechanisms put in place to ensure that all elements of BAT with regards to landspreading are undertaken each campaign should be reported to EBRD.	

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	<p>nuisance where neighbours are likely to be affected, by doing in particular all of the following:</p> <ul style="list-style-type: none"> ▪ Spreading during the day when people are less likely to be at home and avoiding weekends and public holidays ▪ Paying particular attention to wind direction in relation to neighbouring houses ▪ Manure can be treated to minimise odour emissions which can then allow more flexibility for identifying suitable sites and weather conditions for land applications. 						
3.1.6	Greenhouse gas emissions for MPF should be calculated which includes waste handling, management, storage and treatment, energy production as well as wastewater management.	Environmental impacts Greenhouse gas emissions	EU BAT EBRD PR3 para 14	Own resources	End 2016 and then each year after for the GHG inventory.	Report on the calculation methodology, procedures and systems to be implemented to EBRD.	
3.1.7	<p>Additional Water Assessments required for Makinsk Poultry Farm: There are a number of additional steps which need consideration:</p> <ul style="list-style-type: none"> • Groundwater pumping test data to assess the potential yields available and the response/impact to superficial aquifer groundwater levels or river stage levels. • Sub-regional water balance 	Sustainable use of water resources and safe supply.	EBRD PR3	Specialist Support	Prior to finalisation of designs	Report showing that water resources questions are covered	

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	<p>developed to assess whether potential abstractions could be sustained by the local aquifer/river system (basic inflows/ outflows considerations).</p> <ul style="list-style-type: none"> • Consideration of the need for groundwater treatment during abstraction. During abstraction the process of degassing may lead to the formation of precipitates which can foul above ground pipework given elevated dissolved mineral content and redox of abstracted groundwater. This needs to be considered because whilst there might be enough water available to meet demands, the chemistry of that water may prohibit its use due to onerous/costly treatment requirements before use. • There is also reference to hydrocarbons in local groundwater – again, this may relate to broader contamination issues which should be taken into account as abstracted water may not be suitable for potable purposes. This should be clarified. 						
PR4 Health and Safety							
4.1.1	Develop and implement a health and safety management system aligned to OHSAS 18001. This should include an audit program for health	Optimisation of health and safety management through a formalised system.	EBRD PR1 Voluntary and best practice	Own resources and /or external consultants (cost dependent on	End of 2017	Develop and implement a health and safety management	

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	<p>and safety and legal compliance to be undertaken by an external consulting company to identify gaps and opportunities for improvement. This should include procedures with regards to high risk activities such as:</p> <ul style="list-style-type: none"> ■ Working at height; ■ Working on electrical equipment; ■ Confined spaces; ■ Electrical lock-off; ■ Permit to work system; and ■ Lone working. <p>Procedures should also be developed for:</p> <ul style="list-style-type: none"> ■ Display screen equipment use in order to minimise repetitive strain; ■ Lone working; ■ Occupational health monitoring including drug and alcohol policy. 			extent of support)		system Annual EHS Report to the Bank	
PR5	Land Acquisition, Involuntary Resettlement and Economic Displacement						
5.1.1	Implement the SEP (See Action 10.1 to develop an SEP) and a formal grievance mechanism, and continued consultation with people affected by land acquisition	Avoid misunderstandings and provide up-to-date information on land acquisition activities	EBRD PR5, PR10	Own resources, local authorities,	From April 2016	Document stakeholder engagement activities to include land acquisition Annual report on stakeholder engagement	
5.1.2	Develop a land acquisition and compensation framework for the purchase of land for new projects. The objectives of the framework should describe how to:	Ensure compliance with EBRD requirements for land acquisition and compensation	EBRD PR5	Own resource	June 2016	Provide report to EBRD with regards to land acquisition framework	

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	<ul style="list-style-type: none"> ■ consider feasible alternative project designs ■ mitigate adverse social and economic impacts from land acquisition ■ provide compensation for loss of assets at replacement cost ■ improve or, at a minimum, restore the livelihood and standards of living 						
PR6 Biodiversity and Living Natural Resources							
6.1.1	<p>In order to provide the requisite baseline survey information to complete a sufficiently robust re-assessment of the effects of the poultry farm upon biodiversity, it is recommended that an additional desk-study exercise is completed, drawing upon more detailed information regarding the ecology of the site (e.g. from local gamekeepers, land managers, academic institutes etc.).</p> <p>Beyond this, an ecological walkover should be undertaken during the summer months in order to qualify the usage of the site by nesting birds, roosting bats and other fauna as encountered.</p> <p>Particular attention should be paid to the relatively less-disturbed areas in the eastern half of the site, outwith the agricultural field network (e.g. around buildings 5-8 and the slaughter house), and any pockets of scrub/woodland.</p>	Biodiversity Protection	EBRD PR6	Specialist studies	September 2016	Provide specialist information to EBRD with information on any ecological sensitivities and mitigation proposals.	
PR7 Indigenous People							
	Not applicable as there are no indigenous people affected by this						

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	project						
PR8	Cultural Heritage						
8.1.1	The EIA process for each new project must consider the range of cultural heritage considerations within EBRD standards.	Cultural heritage impacts	EU EIA	Own resources and/or EIA consultant	As required	Completed EIA accepted and assessed by national regulator.	
8.1.2	Develop a chance find procedure to be used during construction to aid in managing archaeological finds. The procedure should include a method for considering whether there are areas with a higher potential for undiscovered archaeology to be present, where an archaeological watching brief should be used.	Cultural heritage impacts	EBRD PR8	Own resources and/or EIA consultant	End 2016	Development of chance find procedure to be submitted to EBRD for review.	
PR10	Information Disclosure and Stakeholder Engagement						
10.1.1	Develop a Stakeholder Engagement Plan, including a Grievance Mechanism (SEP)	EBRD performance requirements	EBRD PR10	WSP is developing an SEP for use by Akfen Energy	March 2016	Disclosure of SEP with regular updates	
10.1.2	Develop a Non-Technical Summary (NTS) for each new project in construction or to be developed in the future providing a project description, the ESIA process, the environmental and social benefits/impacts, mitigation and management measures and the contact details for communications with a link to the SEP	EBRD performance requirements	EBRD PR10	WSP is developing an NTS for the investment for public disclosure	March 2016	Disclosure NTS in the public domain	
10.1.3	Implement the SEP and grievance mechanism to ensure a continuous and systematic stakeholder engagement programme throughout the project life cycle. Documentation of all stakeholder activities and logging of grievances to inform the annual monitoring report. The SEP should be reviewed and if necessary	Information dissemination and continuous engagement with affected stakeholders	EBRD PR10	Own resources with a key role for the CLO	Prior to and during construction	Document stakeholder engagement activities Annual report on stakeholder engagement Document grievances,	

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	updated annual or when changes occur in the Project.					response to grievances with records maintained.	
10.1.4	Appoint a Community Liaison Officer (CLO) with appropriate skills and experience to effectively manage the implementation of the SEP	Liaison with local communities and authorities on a regular basis, analyse interaction and provide updates and practical recommendations	EBRD PR 1 EBRD PR 10	Own resources	Prior to recommencement of construction	Appointment of CLO	
10.1.5	Disclosure of documents that include the SEP, NTS and the ESAP in accordance with requirements for EBRD Category A projects	EBRD performance requirements	EBRD PR10	Own resources	See SEP for full details of information to be disclosed and the timeframes	Disclosure of key documents in the public domain Document grievances and response to grievances with records maintained	
Animal Welfare							
11.1.1	Provide details ensuring that stocking densities for broilers are below EU limits of 42kg of live weight per m ² at all times.	Animal welfare requirements	Animal welfare requirements Best practice	Own resources	When at full production level after commissioning	Report and calculations should be provided to EBRD for review.	
11.1.2	Detailed mortality statistics should be provided and monitored in order to improve flock performance and identify situations where additional stress is being placed on the birds in order to take additional measures e.g. such as additional cooling in summer.	Animal welfare requirements	Animal welfare requirements Best practice	Own resources	When at full production level after commissioning	Report and calculations should be provided to EBRD for review along with proposed mitigation measures to address suggested higher mortality rates in summer.	
11.1.3	Ammonia and carbon dioxide should be monitored within the houses and not exceed 20ppm and 3,000 ppm respectively.	Animal welfare requirements	Animal welfare requirements Best practice	External and internal resources	When at full production level after commissioning	Details of monitoring arrangements implemented and results should be reported to EBRD along with timescale for implementation of any mitigation	

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						measures should the results be higher than the limits.	
11.1.4	The Broiler Directive (2007/43) requires a minimum of six hours of darkness for broiler flocks after seven days of age, up to three days before slaughter. At least four of these six hours must be provided within an uninterrupted period of darkness. Changes would need to be made to the current regime in order to be compatible with EU requirements.	Animal welfare requirements	Animal welfare requirements Best practice	External and internal resources	From first operation	Details of amendments made to lighting systems should be provided along with the proposed new arrangements.	
11.1.5	Rendered chicken from MPF should not be used in the feed formulation as a protein source within the feed for the chickens. This is not acceptable under EU animal by-product regulations.	Animal by-product regulations	Animal by-product regulations Best practice	Own resources	From first operation	Details should be provided of when this practice has ceased to occur. Details should be provided to EBRD on a quarterly basis of the amount of material rendered, the amount sold and removed off-site along with the amount held on site in the form of a mass balance.	
11.1.6	A review of the medicine levels applied to the chickens should be undertaken to minimise the use of anti-biotics. Any medicines used should be approved for use within the EU.	Animal welfare requirements	Animal welfare requirements Best practice	External and internal resources	From first operation	Details should be provided of any changes to the medicines and way they are applied and what replacement medicines are to be used in place of those not considered suitable for use within the EU.	

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